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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/052,973 | 10/29/2001 | James H. Bennett | 7190-D20 | 3960 |

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BASF CORPORATION
PATENT DEPARTMENT
1609 BIDDLE AVENUE
WYANDOTTE, MI 48192

EXAMINER

DICUS, TAMRA

ART UNIT PAPER NUMBER

1774

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | | |
|-----------------|-------------------------|--|
| Application No. | Applicant(s) | |
| 10/052,973 | JAMES H. BENNETT ET AL. | |
| Examiner | Art Unit | |
| Tamra L. Dicus | 1774 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendments

The 102(b) rejection over USPN 5,407,988 to Kogowski is withdrawn due to Applicant's arguments. Cancellation of claims 1-33 are acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 34, 35-38, and 43-46 (new) are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,059,471 to McNally et al.

McNally teaches a tile product composed of thermoplastic extruded material such as polypropylene or polybutylene, or other polymeric resins that further comprise pigmented colorants of various colors of red, green, blue, white, and black and particles having a U.S. mesh size between 60 and 200, meeting the Applicant's range from -10 to +5000. Refer to col. 2, lines 5-45. Such tile creates a unique appearance (meeting the new limitation "color-containing thermoplastic resin system comprising a pigment or dye and a resin compatible with extruded thermoplastic for creating appearance on surface"). McNally teaches a first layer of thermoplastic vinyl polymer, polypropylene or polybutylene as the tile base and applies a second layer of plurality of particles or chips that may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material with a compressive force such as a direct roll coater. See col. 1, lines 43-66. To the underlying thermoplastic base that is

"substantially free of" color resin system (instant claims 38), the prior art also provides because the claims do not discuss a specific amount excluded from an underlying thermoplastic base that constitutes how much "substantially free of" actually includes. Further the product of McNally includes an additional color resin system layer separate from the underlying thermoplastic base, which is equivalent to "substantially free of" because the resinous color layer is separate from the resinous base.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 34-53 (new) are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,407,988 to Kogowski in view of USPN 6,136,441 to MacGregor et al., USPN 5,059,471 to McNally et al., and USPN 5,496,630 to Hawrylko et al.

Kogowski teaches granite-looking ASA copolymers (prepared by polymerizing acrylonitrile, styrene, and an acrylate such as acrylic acid, PMMA, where copolymer blends contain polymers from 1 to 50 weight percent acrylonitrile, styrene, and acrylate) are well known thermoplastics and may be molded with colorants of orange, green, and black (plurality of particles of pigment or dye) through an extruder having 3 zones to produce a plaque (sheet-like molded thermoplastic product), also other polymers suitable for blending include polyesters PET and PBT (meeting a resin compatible with extruded thermoplastic for creating appearance on surface). A plaque inherently has at least one visible surface, see also col. 1, lines 18-30, that

include such material used to make products such as bathtubs, shower stalls, and spas. See further col. 2, lines 5-65 col. 3, lines 1-20 and patented claims 1-33.

Kogowski does not explicitly disclose a second extruded underlayer. However, McNally teaches a first layer of thermoplastic vinyl polymer, polypropylene or polybutylene as the tile base and applies a second layer of plurality of particles or chips that adhere to the first layer and may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material with a compressive force such as a direct roll coater. See col. 1, lines 43-66. Hence it would have been obvious to one of ordinary skill in the art to modify the thermoplastic granite-looking product to define such a product with color and resin in a layer adhered to a thermoplastic layer since Kogowski teaches the product extruded and McNally teaches producing these two compatible layers adhering to each other to make a decorative tile.

Kogowski does not state a layer is substantially free of color-containing resin. The product of McNally includes an additional color resin system layer separate from the underlying thermoplastic base, which is equivalent to "substantially free of" because the resinous color layer is separate from the resinous base. It would have been obvious to one of ordinary skill in the art to modify the resin of Kogowski to include an extruded thermoplastic layer because McNally teaches a separate extruded thermoplastic layer for support as cited above.

4. Kogowski does not expressly disclose the mesh size of the particles in the color-containing system of claims 37 or 46. However, McNally discloses color particles or chips may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material, have a U.S. mesh size between 60 and 200, meeting the Applicant's range from -10 to +5000. Refer to col. 2, lines 24-45. Hence it would have been obvious to one of ordinary skill

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in the art to modify the colorant particles and polymer blend of Kogowski to further include colorant particles having a U.S. mesh size as claimed since McNally teaches it is suitable for ABS/acrylic materials and may contain a single or various colors of red, green, blue, white, and black pigmented resins for use in a thermoplastic produced tile and by using various particle size creates an illusion depth appearance (meeting new limitation "color-containing thermoplastic resin system comprising a pigment or dye and a resin compatible with extruded thermoplastic for creating appearance on surface") at col. 2, lines 25-68, col. 1, lines 43-68, col. 4, lines 1-10, col. 5, lines 44-56, and Example 2.

Kogowski does not explicitly disclose polycarbonate blended with ABS or ASA or the blend ratios of claims 40, 42, 48, and 50. MacGregor teaches blends of polycarbonate and polyester from 50:50 to 90:10 at col. 6, lines 55-62 and an ABS/PC blend containing 15 to 85 weight % PC and 15 to 85 weight percent ABS resins at col. 8, lines 39-46 (including claims 28 and 30). MacGregor teaches such polymeric blends may be layered and further include decorative color interlayers. See also col. 9, lines 6-10, col. 10, lines 1-15, col. 10, lines 5-59 teaching blends of PET, PBN, PPT, MBS, ABS, polyphenylene ether and polystyrene resins. Hence it would have been obvious to one of ordinary skill in the art to further include blends of ABS or ASA with PC, PET, PBN, PPT, MBS, ABS, polystyrene since MacGregor teaches the very compatibility of these specific polymers.

Further addressing claims 39, 41, 47, 49 and 52-53 to the ingredients recited. Hawrylko teaches a thermoplastic multilayer product disclosing it is known to blend color mica (colored particles) dispersed in liquid polymer ingredients such as urethanes, vinyl, acrylics, and styrene resins that are coextruded to be laminated over a substrate at col. 1, lines 55-68. Therefore it

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would have been obvious to one of ordinary skill in the art to modify the thermoplastic product of Kogowski to further include the aforementioned binders since Hawrylko provides color particles with resins to produce a colorful coating for a multilayered thermoplastic product at col. 1, lines 50-66. Also providing an obvious modification to include the ingredients in an extruded thermoplastic layer or resin system because they are all to suitable thermoplastic resins used in extrusion processes.

Response to Arguments

Applicant's arguments filed 11-26-03 have been fully considered but they are not persuasive. Applicant argues '471 or '988 do not suggest the novelty of the instant invention because of Applicant's new limitation to "consisting essential of". Regarding Applicants arguments of prior art '988 containing particles or fibers not on top of an extruded thermoplastic base and that "consisting essential of" language affects the novel characteristic of the subject invention, such arguments are not persuasive because the prior art provides no indication the material would not function any different from the claimed invention. The Examiner does not agree the novelty would be affected by the inclusion of an additional adhesive layer. The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52. "A consisting essentially of claim occupies a middle ground between closed claims that are written in a consisting of format and fully open claims that are drafted in a comprising format." *PPG Industries v. Guardian Industries*, 156 F.3d 1351, 1354, 48 USPQ2d 1351, 1353-54 (Fed. Cir.1998). See also *Atlas Powder v. E.I. duPont de Nemours & Co.*, 750 F.2d 1569. Absent a clear indication in the

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specification or claims of what the basic and novel characteristics actually are (e.g. absence of an adhesive layer interdispersed particles and base thermoplastic), "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., *PPG*, 156 F.3d at 1355. The prior art includes extruded particles over a thermoplastic extruded base, which is the same as Applicant claims. Adding adhesive does not affect the novelty of the instant invention. Applicant further argues the compatibility of the resins involved, e.g. the color-containing thermoplastic resin system and the extruded thermoplastic layer. The Applicant has not persuasively argued because the resins of the prior art are the same as Applicant instantly claims. Therefore, they are inherently compatible. Applicant argues '471 does not teach compatibility because the resins could not "interact with" the underlying base. The applicant is arguing the capability and not the resin material itself. That a resin is capable of "interacting with" an extruded layer, does not teach away from the material, structure, or claimed novelty of the instant invention. It has been held that an element that is "being able to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138. Both '471 and '988 provide the same materials and structure as Applicant instantly claims. Applicant alleges that patent '988 does not teach a thermoplastic resin system with color bonded and extruded to a material. Applicant points to fibers of '988 used to make the granite-looking thermoplastic sheet, but appears to overlook the same materials are used e.g. acrylonitrile/styrene/acrylate copolymers with colorants dispersed within such as titanium dioxide, which make up a thermoplastic resin system with color produced with an extruder (equivalent to extruded thermoplastic). See col. 1, lines 15-68, col. 2, lines 1-27 and lines 55-68, and col. 3, lines 1-15. Further, the instant invention does not *exclude* fibers. The

fibers are resinous thermoplastics and impart a granite-like appearance. The instant invention merely claims a color resin system disposed on a surface or compressed into (a process limitation that is given little weight) a surface. Extrusion accomplishes this very concept, which the prior art provides. Further to Applicants contentions to instant claim 51 being formed "at a moment of time" after compressive force is applied is also a process limitation. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 29 531.

To the underlying thermoplastic base that is "substantially free of" color resin system (instant claims 38 and 51), the prior art also provides because the claims do not discuss a specific amount excluded from an underlying thermoplastic base that constitutes how much "substantially free of" actually includes. Further the product of '471 includes an additional color resin system layer separate from the underlying thermoplastic base, which is equivalent to "substantially free of" because the resinous color layer is separate from the resinous base.

The Applicant raises discussion over U.S. Patent 6,372,164; however, the Examiner did not use this publication in the rejection.

Applicant alleges none of the references used in the 103 rejection teach the claimed invention. The Examiner does not agree. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

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208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). All references teach independently or in combination resins with color that are extruded to produce a thermoplastic extruded sheet. In fact, Kogowski actually teaches the same resins and mesh sizes, MacGregor teaches the same blend percentages, and all other cited references are combinable as they are all within polymeric extrusion art. No distinction is seen.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-8329.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tamra L. Dicus
Examiner
Art Unit 1774

December 21, 2003



ELIZABETH M. LLANEY
PRIMARY EXAMINER